Notice of Allowability	Application No.	Applicant(s)	
	09/776,175	AZADET ET AL.	
	Examiner	Art Unit	
	Esaw T. Abraham	2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *amdt filed on 02/08/06*.

2. ☒ The allowed claim(s) is/are *1-29*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

GUY LAMARRE
PRIMARY EXAMINER

DETAILED ACTION

Examiner's statement for reason for allowance

1. Claims **1-29** have been allowed.

The following is an examiner's statement for allowance:

As per claim 1:

The prior art or record, Kawai et al. (U.S. PN: 6,363,514) teach detection means for detecting a syncword included in each frame constituting a bit stream; re-detection means for detecting, when the detection means fails in detecting the syncword, a syncword included in a subsequent frame; checking means for checking, when the re-detection means succeeds in detecting the syncword, correctness of bit stream information included in the subsequent frame; and decoding means for decoding, when the checking means verifies the correctness of the bit stream information, audio data in the frame with which the detection means fails to detect the syncword and further the checking means may carry out CRC (cyclic redundancy check) when the frame includes CRC data, and the decoding means may halt decoding of audio data when the checking means detects a CRC error (see col. 2, lines 45-60). The prior art of record, Muller et al. (U.S. PN: 6,873,630) further teach or disclose an ethernet architecture is provided for connecting a computer system or other network entity to a dedicated Ethernet network medium (abstract). Muller et al. teach that on a receiving station, the receiver's network interface includes a collector for collecting the multiple mini-frames (e.g., after decoding) and reconstructing the frame's byte stream (e.g., for transfer to the receiver's MAC). The first and last bytes of each frame and mini-frame are marked for ease of

recognition. Multiple unique idle symbols may be employed for transmission during inter-packet gaps to facilitate the collector's synchronization of the multiple channels and/or enhance error detection (see abstract). However, the prior arts taken singly or in combination fail to teach, anticipate, suggest, or render obvious a communication system, comprising a method for frame delineating in a data transmitting a plurality of data frames temporally separated by respective inter-packet gaps (IPGs), each IPG having positioned within it at least a synchronization pattern suitable for delineating a respective data frame and identifying a transition point between said respective data frame and a subsequent control portion. Consequently, claim 1 is allowed over the prior art.

Claims **2-9, 27 and 28,** which is/are directly or indirectly dependent/s of claim 1 are also allowable over the prior art of record.

As per claim 10:

The prior art or record, Kawai et al. (U.S. PN: 6,363,514) teach detection means for detecting a syncword included in each frame constituting a bit stream; re-detection means for detecting, when the detection means fails in detecting the syncword, a syncword included in a subsequent frame; checking means for checking, when the re-detection means succeeds in detecting the syncword, correctness of bit stream information included in the subsequent frame; and decoding means for decoding, when the checking means verifies the correctness of the bit stream information, audio data in the frame with which the detection means fails to detect the syncword and further the checking means may carry out CRC (cyclic redundancy check) when the frame includes

CRC data, and the decoding means may halt decoding of audio data when the checking means detects a CRC error (see col. 2, lines 45-60). The prior art of record, Muller et al. (U.S. PN: 6,873,630) further teach or disclose an ethernet architecture is provided for connecting a computer system or other network entity to a dedicated Ethernet network medium (abstract). Muller et al. teach that on a receiving station, the receiver's network interface includes a collector for collecting the multiple mini-frames (e.g., after decoding) and reconstructing the frame's byte stream (e.g., for transfer to the receiver's MAC). The first and last bytes of each frame and mini-frame are marked for ease of recognition. Multiple unique idle symbols may be employed for transmission during inter-packet gaps to facilitate the collector's synchronization of the multiple channels and/or enhance error detection (see abstract). However, the prior arts taken singly or in combination fail to teach, anticipate, suggest, or render obvious a method for delineating data frames within a communications link comprising receiving a data stream to be transmitted as a sequence of data frames; and inserting, into a temporal region following each transmitted data frame, a synchronization pattern suitable for delineating said data frame and identifying a transition point between said respective data frame and a subsequent control portion. Consequently, claim 10 is allowed over the prior art.

Claims **11-14 and 29,** which is/are directly or indirectly dependent/s of claim 10 are also allowable over the prior art of record.

As per claim 15:

The prior art or record, Kawai et al. (U.S. PN: 6,363,514) teach detection means for detecting a syncword included in each frame constituting a bit stream; re-detection means for detecting, when the detection means fails in detecting the syncword, a syncword included in a subsequent frame; checking means for checking, when the re-detection means succeeds in detecting the syncword, correctness of bit stream information included in the subsequent frame; and decoding means for decoding, when the checking means verifies the correctness of the bit stream information, audio data in the frame with which the detection means fails to detect the syncword and further the checking means may carry out CRC (cyclic redundancy check) when the frame includes CRC data, and the decoding means may halt decoding of audio data when the checking means detects a CRC error (see col. 2, lines 45-60). The prior art of record, Muller et al. (U.S. PN: 6,873,630) further teach or disclose an ethernet architecture is provided for connecting a computer system or other network entity to a dedicated Ethernet network medium (abstract). Muller et al. teach that on a receiving station, the receiver's network interface includes a collector for collecting the multiple mini-frames (e.g., after decoding) and reconstructing the frame's byte stream (e.g., for transfer to the receiver's MAC). The first and last bytes of each frame and mini-frame are marked for ease of recognition. Multiple unique idle symbols may be employed for transmission during inter-packet gaps to facilitate the collector's synchronization of the multiple channels and/or enhance error detection (see abstract). However, the prior arts taken singly or in combination fail to teach, anticipate, suggest, or render obvious a method for transmitting data, comprising transmitting, to a physical media dependent (PMD) layer,

a sequence of idle control characters; transmitting, to said PMD layer, a start of frame delineator (SFD) upon detecting the presence of data to be transmitted; transmitting said received data until an entire data frame has been transmitted; and transmitting, upon the transmission of said entire data frame, an end of frame delineator (EFD) and a termination flag (T-FLAG), said T-FLAG comprising a respective relatively long synchronization pattern suitable for delineating said data frame and identifying a transition point between said respective data frame and a subsequent control portion. Consequently, claim 15 is allowed over the prior art.

Claims **16-19,** which are directly or indirectly dependent of claim 15 are also allowable over the prior art of record.

As per claim 20:

The prior art or record, Kawai et al. (U.S. PN: 6,363,514) teach detection means for detecting a syncword included in each frame constituting a bit stream; re-detection means for detecting, when the detection means fails in detecting the syncword, a syncword included in a subsequent frame; checking means for checking, when the re-detection means succeeds in detecting the syncword, correctness of bit stream information included in the subsequent frame; and decoding means for decoding, when the checking means verifies the correctness of the bit stream information, audio data in the frame with which the detection means fails to detect the syncword and further the checking means may carry out CRC (cyclic redundancy check) when the frame includes CRC data, and the decoding means may halt decoding of audio data when the checking means detects a CRC error (see col. 2, lines 45-60). The prior arts of record, Muller et

al. (U.S. PN: 6,873,630) further teach or disclose an ethernet architecture is provided for connecting a computer system or other network entity to a dedicated Ethernet network medium (abstract). Muller et al. teach that on a receiving station, the receiver's network interface includes a collector for collecting the multiple mini-frames (e.g., after decoding) and reconstructing the frame's byte stream (e.g., for transfer to the receiver's MAC). The first and last bytes of each frame and mini-frame are marked for ease of recognition. Multiple unique idle symbols may be employed for transmission during inter-packet gaps to facilitate the collector's synchronization of the multiple channels and/or enhance error detection (see abstract). However, the prior art taken singly or in combination fail to teach, anticipate, suggest, or render obvious a method for receiving data, comprising: determining data frame delineation points within a received data stream by detecting the presence of a synchronization pattern within said data stream, said synchronization pattern being positioned within inter-packet gaps (IPGs) and identifying a transition point between a respective data frame and a subsequent control portion; and forming data frames for subsequent processing by utilizing said determined delineation points. Consequently, claim 20 is allowed over the prior art.

Claims **21-26,** which are directly or indirectly dependent of claim 20 are also allowable over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US PN: 6,363,514 Kawai et al.

4. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Esaw Abraham whose telephone number is (571) 272-3812. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are successful, the examiner's supervisor, Albert DeCady can be reached on (571) 272-3819. The fax phone numbers for the organization where this application or proceeding is assigned (571) 273-8300.

Information regarding the status of an Application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or PUBLIC PAIR. Status information for unpublished applications is available through Private Pair only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Esaw Abraham

Esaw Abraham

Art unit: 2133

GUY LAMARRE
PRIMARY EXAMINER